answers 2

Operating manual

SCENIC N / SCENICO N / CELSIUS K

English

FUJITSU COMPUTERS SIEMENS

Are there ...

... any technical problems or other questions which you would like to be clarified?

Please contact:

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SCENIC N / SCENICO N / CELSIUS K

Operating manual

Introduction

Important notes

Preparing for use

Operation

Troubleshooting and tips

System expansions

Technical data

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October 2004 edition

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SCENIC N / SCENICO N / CELSIUS K...

...is available with various configuration levels with different hardware and software. In addition, you can install accessible drives (e.g. DVD drive), hard disks and other boards.

This manual tells you how to put your device into operation and how to operate it in daily use. This manual applies for all configuration levels. Depending on the configuration level chosen some of the hardware components described may not be available on your PC. Please observe the notes on your operating system.

Depending on the configuration selected, the operating system is preinstalled on your hard disk (e.g. Windows XP).

Your device has a number of security features to ensure that no unauthorised persons can access your data. The security functions in the *BIOS Setup* also allow you to protect your data by means of passwords.

DeskUpdate allows you under some operating systems to easily and quickly install the latest drivers and operating system extensions with a few mouse clicks. *DeskUpdate* is contained on the "Drivers & Utilities" CD.

Further information on this device is provided:

- in the "Getting Started" manual
- in the "Safety" manual
- in the "Ergonomics" manual
- in the "Warranty" manual
- in the operating manual for the monitor
- in the technical manual for the mainboard
- in the "BIOS Setup" manual
- in your operating system documentation
- in the information files (e.g. **.TXT*, **.DOC*, **.CHM*, **.HLP, *.PDF, *.HTML*)

You will find an electronic version of some of the listed manuals on the "User Documentation" or "Drivers & Utilities" CD.

You can access and view the required information using the *Acrobat Reader* program, which is also on the CD. If necessary, you can also make a print version of the manual.

Overview of product features

The overview shows the most important product features (standard configurations. Since Fujitsu Siemens Computers adjusts the systems to suit customer requirements, the product features may not match those of your system.

	SCENIC N / SCENICO N / CELSIUS K
Mechanical access protection	
Device for "Kensington Lock"	X
Eye for padlock or for sealing	X
BIOS-based access protection	
System passwords	X
Activating and deactivating interfaces, including USB	X
Boot and write protection for floppy disk and hard disk drives	X
Virus protection in the BIOS	X
Virus protection	
F-Secure virus scanner	X
Administration functions	
Client Management: local administration with DeskView	X

Notational conventions

The meanings of the symbols and fonts used in this manual are as follows:

indicates information which is important for your health or for preventing physical damage.

indicates important information which is required to use the system properly.

► Text which follows this symbol describes activities that must be performed in the order shown.

`This font` indicates screen outputs.

This font indicates commands or menu items.

"Quotation marks" indicate names of chapters or terms.

Important notes

In this chapter you will find information regarding safety which it is essential to take note of when working with your device.

Safety notes

Pay attention to the information provided in the "Safety" manual and in the following security notes.

During installation and before operating the device, please observe the instructions on environmental conditions in the "Technical data" chapter as well as the instructions in the "Preparing for use" chapter.

You may only operate the device, if the voltage for the device is set to the local mains voltage.

The ON/OFF switch does not disconnect completely the device from the mains voltage. To completely disconnect the mains voltage, remove the power plug from the grounded mains outlet.

Replace the lithium battery on the mainboard in accordance with the instructions in the "Extensions to the mainboard" - "Replacing lithium battery" section.

Caution, components in the system can get very hot.

Energy saving, disposal and recycling

Further information can be found on the "User Documentation" or "Drivers & Utilities" CD provided with your computer.

CE marking

The shipped version of this device complies with the requirements of the EEC directives 89/336/EEC "Electromagnetic compatibility" and 73/23/EEC "Low voltage directive".

FCC Class B Compliance Statement

The following statement applies to the products covered in this manual, unless otherwise specified herein. The statement for other products will appear in the accompanying documentation.

NOTE:

This equipment has been tested and found to comply with the limits for a "Class B" digital device, pursuant to Part 15 of the FCC rules and meets all requirements of the Canadian Interference-Causing Equipment Standard ICES-003 for digital apparatus. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in strict accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Fujitsu Siemens Computers GmbH is not responsible for any radio or television interference caused by unauthorised modifications of this equipment or the substitution or attachment of connecting cables and equipment other than those specified by Fujitsu Siemens Computers GmbH. The correction of interferences caused by such unauthorised modification, substitution or attachment will be the responsibility of the user.

The use of shielded I/O cables is required when connecting this equipment to any and all optional peripheral or host devices. Failure to do so may violate FCC and ICES rules.

Transporting the device

Transport all parts separately in their original packaging or in a packaging which protects them from knocks and jolts, to the new site. Do not unpack them until all transportation manoeuvres are completed.

Cleaning the device

Turn off all power and equipment switches and remove the power plug from the mains supply.

Do not clean any interior parts yourself, leave this job to a service technician.

Do not use any cleaning agents that contain abrasives or may corrode plastic.

Ensure that no liquid enters the system.

Wipe the casing with a dry cloth. If particularly dirty, use a cloth that has been moistened in mild domestic detergent and then carefully wrung out. Use disinfectant wipes to clean the keyboard and the mouse.

Preparing for use

Please take note of the safety information in the "Important notes" chapter.

Unpacking and checking the delivery

It is recommended not to throw away the original packaging material! It may be required for reshipment at some later date.

- ► Unpack all the individual parts.
- ► Check the delivery for damage incurred during transportation.
- ► Check whether the delivery agrees with the details in the delivery note.

Should you discover that the delivery does not correspond to the delivery note, notify your local sales outlet immediately.

Steps for initial setup

Only a few steps are necessary to put your new device into operation for the first time:

- – Select location for device and set up device
- – Connect the monitor, mouse and keyboard
- – Check the voltage at the mains outlet and connect the device to an electrical outlet
- – Switching the device on

You will learn more about the individual steps in the following sections.

External devices

If you have received other devices in addition to your PC or workstation (e.g. a printer or a modem), do not connect these until after the initial installation. The following sections contain a description of how to connect these external devices: "Connecting external devices to the serial port", "Connecting external devices to the parallel port" and "Connecting external devices to the USB ports".

Drives and boards

If you have received drives or boards with your device, please do not install them until after first-time setup. How to install drives and boards is described in the "System expansions" chapter.

Setting up the device

When installing your device, give consideration to the recommendations and safety notes in the "Safety" manual.

Set up the device only in its correct orientation.

We recommend that you place your device on a surface with good anti-slip qualities. In view of the multitude of different finishes and varnishes used on furniture, it is possible that the rubber feet will mark the surface they stand on.

Do not expose the device to extreme environmental conditions (see "Technical data" chapter). Protect the device from dust, humidity, and heat.

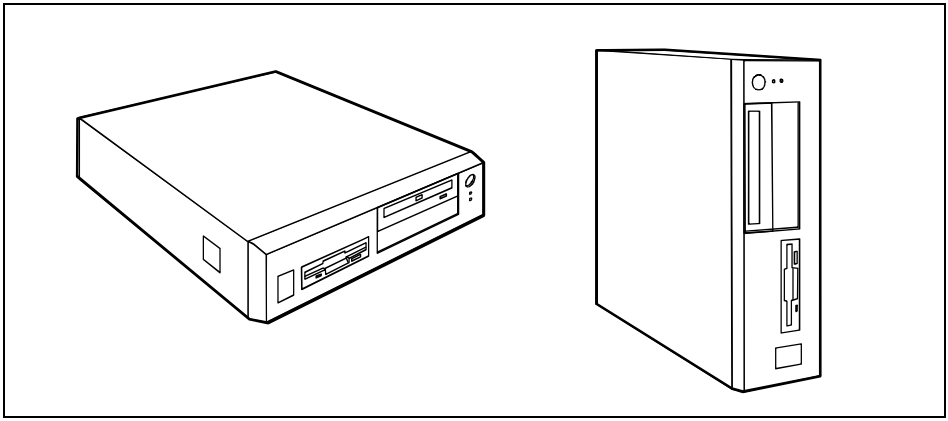
When installing the workstation, provide sufficient clearance around the device, as indicated in the "Technical data" chapter to ensure adequate ventilation. In order to avoid overheating, do not cover the ventilation area of the monitor or the device.

Do not stack several devices on top of each other.

If you place a monitor on the device, it may weigh a maximum of 25 kg.

Depending on the location of your device, bothersome vibrations and noises may occur. To prevent this, a distance of at least 3 mm should be maintained from other devices on casing sides without ventilation surfaces. In addition, we recommend placing the device on support feet, as these buffer vibrations.

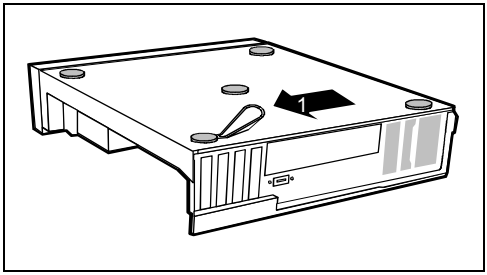
The device can operate in either a horizontal or vertical position.



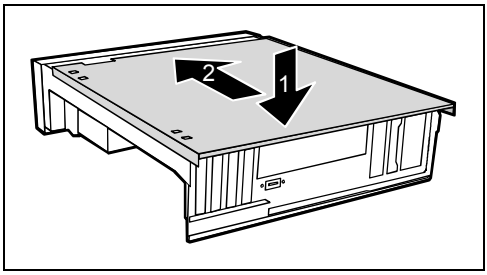
Side cover (in vertical operating position)

To improve the appearance in the vertical operating position, you can mount the side cover (available as an option).

- ► If you have already operated the device switch it off and disconnect all cables from the casing.
- ► Open the casing (see "Opening the casing" chapter).
- ► Carefully turn over the casing so that the open top is facing downward.



► Remove the five support feet of the casing by pushing the narrow side of the lever (1) provided under each support foot and pressing it away upward.



► Lay the side section on the underside of the casing so that the lug faces the front of the casing (1).

► Push the side section forward until it engages in the front of the casing and in the side guides (2).

- ► Turn the casing over.
- ► Close the casing (see "Closing the casing" chapter).
- ► Connect the cables again.

Connect the monitor, mouse and keyboard

The ports for the monitor, mouse, and keyboard are on the rear and front (USB ports, optional) of the device.

Keyboard port / purple

Monitor port / blue

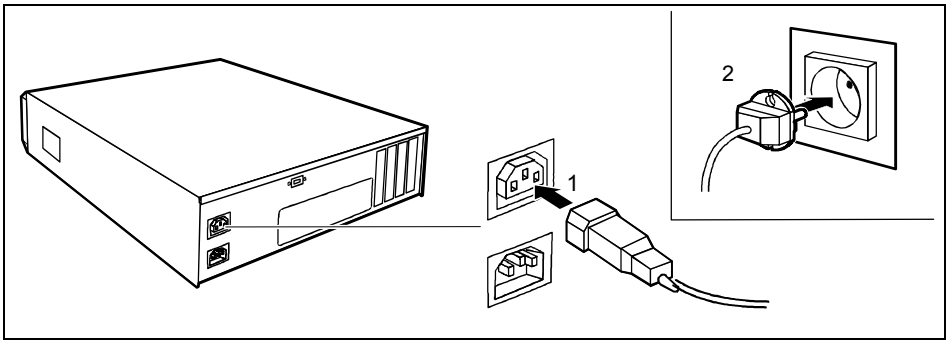
PS/2 mouse port / green

USB port / black

Connecting the monitor

► Follow the instructions contained in the monitor manual to prepare the monitor for operation (e.g. connecting cables).

► Plug the data cable into the monitor port of the device.



► Depending on your device configuration level, plug the monitor power cable into either the system unit (1) or a grounded mains outlet (2).

The monitor power cable may only be connected to the device monitor socket if the monitor current consumption is smaller than 1,5 A with 230 V or 3 A with 115 V. The values for the monitor current consumption can be found in the technical data on the monitor or in the operating manual for the monitor.

Connecting the mouse

Depending on the equipment level selected, your device will be supplied with a PS/2 mouse or a USB mouse.

Connecting a PS/2 mouse

► Connect the PS/2 mouse to the PS/2 mouse port of the device.

Connecting USB mouse

► Connect the USB mouse to the USB port of the device.

i If you do not attach a mouse at the PS/2 mouse port, you can disable the mouse controller in the *BIOS Setup* in order to free the IRQ12 for a different application.

Connecting a keyboard

Depending on the equipment level selected, your device will be supplied with a standard keyboard or a USB keyboard.

Connecting standard keyboard

Use the supplied keyboard cable only.

► Plug the other end of the keyboard cable (square plug) into the socket on the underside of the keyboard.

► Plug the round plug of the keyboard cable into the keyboard port on the device.

Connecting USB keyboard

Use the supplied keyboard cable only.

► Plug the other end of the keyboard cable (square plug) into the socket on the underside of the keyboard.

► Insert the rectangular USB plug of the keyboard cable into the USB port of the device.

Connecting the device to the mains voltage

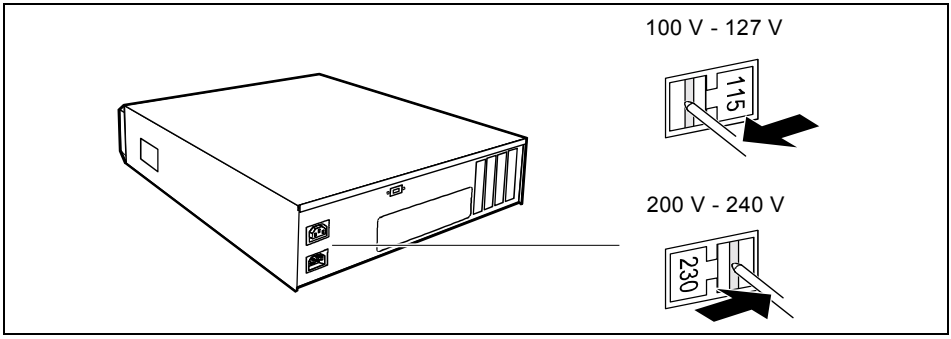
Some units have a wide-range power supply, depending on the configuration level. This means that manual voltage setting is not necessary for these devices. Therefore there is no switch available for the voltage setting.

The following refers to the other devices:

The value indicated with an arrow must be compatible with the local rated voltage:
115 = 100 V to 127 V 230 = 200 V to 240 V

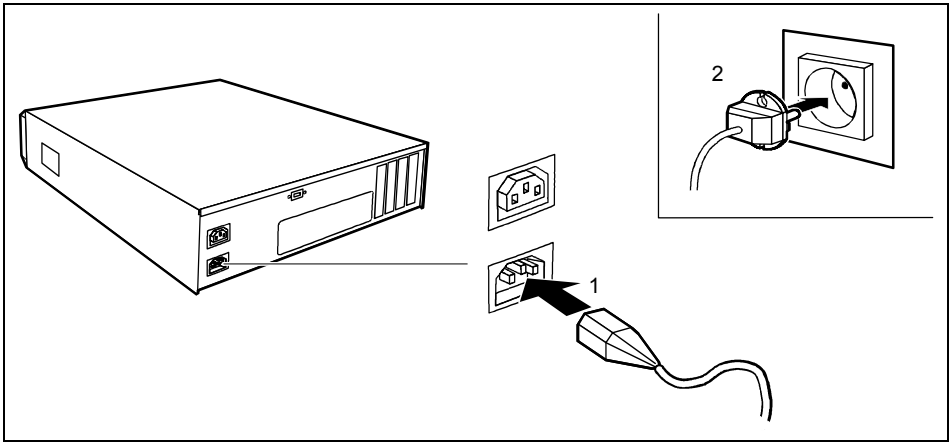
If an incorrect mains voltage is set, push the slide switch all the way into the other possible position with a pointed object.

You may only operate the device, if the voltage for the device is set to the local mains voltage.



On devices with voltage setting switch:

► Check the voltage setting.



► Connect the power cable to the device (1).

► Plug the power plug into a grounded mains outlet (2).

Initial switch-on: Software will be installed

If the device is connected to a network, the network protocol is required as well as the user and server details. Contact your network administrator if you have any questions about these settings.

When you switch on your device for the first time, the supplied software is installed and configured. You should plan some time for this, as this process must not be interrupted.

Once the installation has been started the device must not be switched off, unless the installation has been completed.

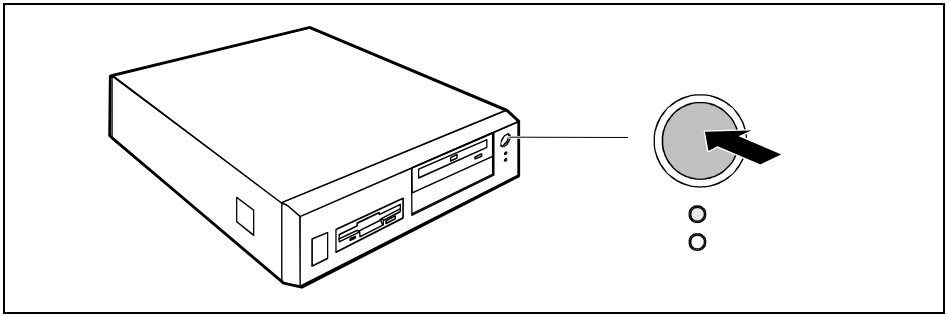
During installation the device may only be rebooted when you are requested to do so!

Otherwise the installation will not be performed correctly. If a fault occurs during the installation, the contents of the hard disk must be completely restored.

You may require the Windows licence number during installation. This number is located on a sticker on your device.

Switching on monitor and device

► Switch the monitor on (see the operating manual for the monitor).



► Press the ON/OFF switch on the front of the device.

The power-on indicator lights up (also see the chapter "Indicators provided by the device").

Installing the software

► During installation, follow the instructions on screen.

Consult the operating system manual if there is anything unclear about the requested input data.

You will find further information about the system, drivers, utilities, updates, manuals etc. on the "Drivers & Utilities" CD supplied.

Connecting external devices

Read the documentation on the external device before connecting it. With the exception of USB devices, always remove all power plugs before connecting external devices.
Do not connect or disconnect cables during a thunderstorm.
Always take hold of the actual plug. Never unplug a cable by pulling the cable itself.
Connect and disconnect the cables in the order described below!

Connecting cables

- Turn off all power and equipment switches.
- Remove all power plugs from the mains outlets.
- Plug all cables into the device and peripherals. You must observe the information provided in the "Important notes" chapter.
- Plug all data communication cables into the utility sockets.
- Plug all power cables into the grounded mains outlets.

Disconnecting cables

- Turn off all power and equipment switches.
- Remove all power plugs from the mains outlets.
- Unplug all data communication cables from the utility sockets.
- Unplug all cables from the device and peripherals.

USB devices are hot-pluggable. This allows cables from USB devices to be connected and disconnected with the system switched on.
Additional information can be found in the "Connecting external devices to the USB ports" section and in the documentation for the USB devices.

Ports provided by the device

The ports for external devices are on the rear and on the front of the device. The ports available on your device depend on the configuration level you have selected. The standard ports are marked with the symbols shown below (or similar). Exact details of the position of the ports are supplied in the technical manuals for the boards.

Keyboard port, purple

PS/2 mouse port, green

Serial port 1, teal or turquoise

Serial port 2, teal or turquoise

Monitor port, blue

Parallel interface / Printer, burgundy

Headphones port, orange or light green

Microphone jack (mono), pink

Audio output (Line out), light green

Audio input (Line in), light blue

USB - Universal Serial Bus, black

LAN connector

Some of the devices that you connect require special drivers (see the operating system and device documentation).

Connecting external devices to the serial port

External devices can be connected to the serial port (e.g. a modem).

► Connect the data cable to the external device.

► Connect the data cable to the serial port .

For an exact description of how to connect external devices to the serial port, please refer to the device documentation.

Settings of the serial port

If you need to change the settings of the serial port (e.g. address, interrupt), you can do so in the *BIOS Setup*. The settings for the port are described in the technical manual for the mainboard or in the "BIOS Setup" manual.

Device drivers

The devices connected to the serial port require drivers. Your operating system already includes many drivers. Nevertheless, if the driver you need is not on the hard disk, please install it from the data carrier supplied with the device or with the application programme.

Connecting external devices to the parallel port

External devices can be connected to the parallel port (e.g. a printer).

► Connect the data cable to the external device.

► Connect the data cable to the parallel port .

For an exact description of how to connect external devices to the parallel port, please see the device documentation.

Settings of the parallel port

If you need to change the settings of the parallel port (e.g. address, interrupt), you can do so in the *BIOS Setup*. The settings for the port are described in the technical manual for the mainboard or in the "BIOS Setup" manual.

Device drivers

The devices connected to the parallel port require drivers. Your operating system already includes many drivers. Nevertheless, if the driver you need is not on the hard disk, please install it from the data carrier supplied with the device or with the application programme.

Connecting external devices to the USB ports

You can connect a wide range of external devices to the USB port (e.g. printer, scanner, modem or keyboard).

USB devices are hot-pluggable. This allows cables from USB devices to be connected and disconnected with the system switched on.

Additional information can be found in the documentation for the USB devices.

► Connect the data cable to the external device.

► Connect the data cable to the USB port .

Device drivers

The devices you connect to the USB ports usually require no driver of their own, as the required software is already included in the operating system. However, if the USB device requires its own software, please install it from the data carrier provided with the USB device.

Operation

Switching the device on

► If necessary, switch the monitor on (see the operating manual for the monitor).

► Press the ON/OFF switch on the front of the device.

The power-on indicator lights green and the device is started.

Switching off the device

► Shut down the operating system properly. For Windows: select *Shut Down* from the *Start* menu.

► If the operating system does not automatically switch the device off, turn the device ready-to-use when requested to do so by pressing the ON/OFF switch.

If the device is ready-to-use, the device consumes very little power.

The ON/OFF switch does not disconnect the device from the mains voltage. To completely disconnect the mains voltage, remove the power plug from the socket.

► If necessary, switch the monitor off (see the operating manual for the monitor).

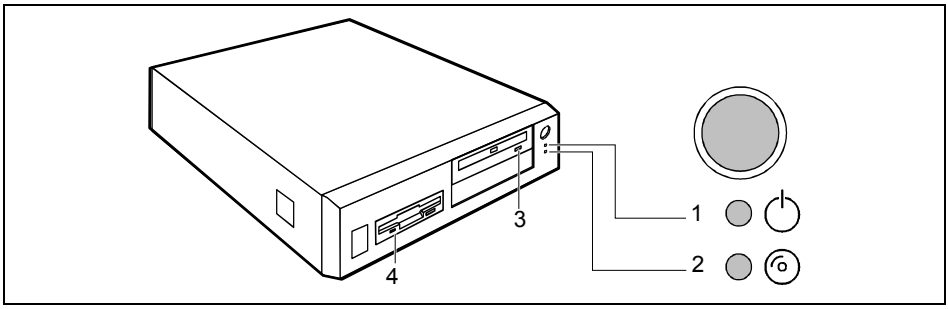
Placing a device (with soft power off function) in a ready-to-operate state by means of software

With the soft power off function the device automatically switches off (standby) or switches into the energy-saving mode after the operating system is shut down. Requirements: Your system must support switching off with software and this functionality must be enabled in *BIOS Setup*. The soft power off software may also need to be installed on Windows NT systems.

You can also switch your device into the standby mode via the *DeskView* software with the *DeskOff* programme.

Indicators provided by the device

The indicators are on the front of the device.



1 = Power-on indicator
2 = Hard disk indicator
3 = CD-ROM indicator
4 = Floppy disk indicator

1 - Power-on indicator

- The indicator is green:
  The device is on.
- The indicator lights orange: The device is in energy-saving mode. After being switched on, the device returns to the state it was in before the energy-saving mode.

  In the energy-saving mode the device may not be disconnected from the mains supply, as this may otherwise result in data loss.
- The indicator does not light up:
  The device is disconnected from the power supply or is ready for operation. If the device is ready-to-operate it can be enabled with the ON/OFF switch.

2 - Hard disk indicator

The indicator lights up when the hard disk drive of the device is accessed.

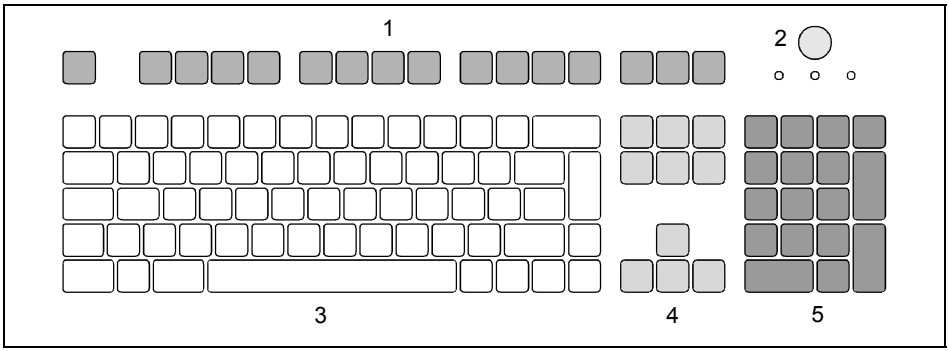
3 - CD-ROM indicator

The indicator lights up when the CD-ROM drive of the device is accessed. You may only remove the CD when the indicator is dark.

4 - Floppy disk indicator

The indicator lights up when the floppy disk drive of the device is accessed. You may only remove the floppy disk when the indicator is unlit.

Keyboard



1 = Function keys
2 = Power button (optional)
3 = Alphanumeric keypad
4 = Cursor keys
5 = Numeric keypad (calculator keypad)

The illustrated keyboard is an example and may differ from the model you use.

Important keys and key combinations

The following description of keys and key combinations refers to MS Windows. Details of other keys and key combinations can be found in the documentation of the relevant application programme.

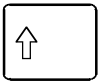
ON/OFF switch (optional)
Depending on the setting in the *BIOS Setup*, the system can be switched on, off, or on and off with this button. Some operating systems allow you to configure additional functions of the ON/OFF switch in the Control Panel.

With some keyboards the ON/OFF switch can only be used with an ACPI (Advanced Configuration and Power Management Interface). Otherwise the key is inoperative. The mainboard must support this function.

Enter key
confirms the marked selection. The enter key is also referred to as the "Return" key.

Start key
calls up the Windows *Start* menu.

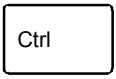
Menu key
invokes the menu for the marked item (Windows).



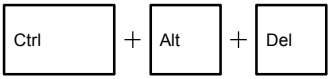
Shift key
enables upper-case letters and the upper key symbols to be used.

Alt Gr (e.g. German keyboard)
produces a character shown on the right-hand side of a key (e.g. the character @ on the key **Q**).

Num key
Switches the numeric key pad between the number ("Num" indicator lights up) and the editing modes ("Num" indicator does not light up).
When the Num Lock indicator is lit the digit and comma keys are active.
When the Num Lock indicator is not lit the cursor control functions are active in the Numeric keypad.



Ctrl key
starts key combination actions. The **Ctrl** key is also called "Ctrl", "Control" or "Control key".



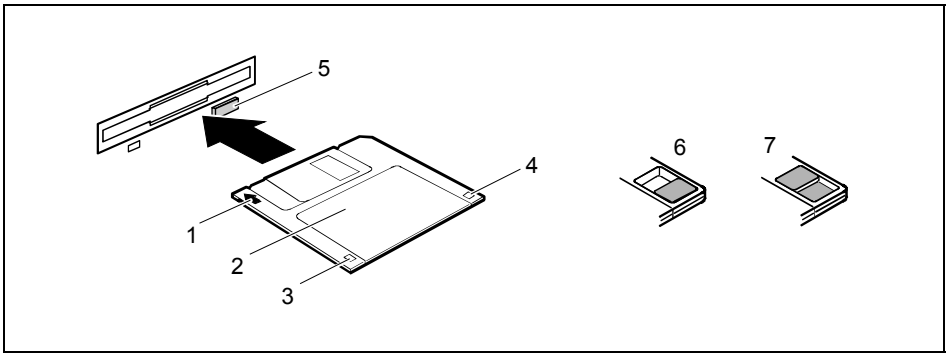
Warm boot
restarts your device. Press simultaneously the keys **Ctrl**, **Alt** + **Del**. Under some operating systems the Task Manager appears first.

Working with floppy disks

i

Follow the instructions supplied by the vendor of the floppy disks.

Never clean the floppy disk drives with cleaning disks. Any attempt would destroy the read/write head in the disk drive within 20 seconds.



1 = Insertion direction
2 = Label area
3 = Write protection tab for a 1.44 Mbyte floppy disk
4 = Identification of a 1.44 MB floppy disk or write protect switch on a 120 MB floppy disk
5 = Eject button for inserted floppy disks
6 = Disk is write-protected
7 = Disk is not write-protected

To insert a diskette

► Push the floppy disk into the drive in the insertion direction (1) until it engages. The label should be facing upward.

To remove a diskette

► Push the eject button (5).

Protect the floppy disk against being overwritten or erased

► Slide the write-protect slider into position (6). The hole is now visible.

Deactivate write protection

► Slide the write-protect slider into position (7). The hole is now covered.

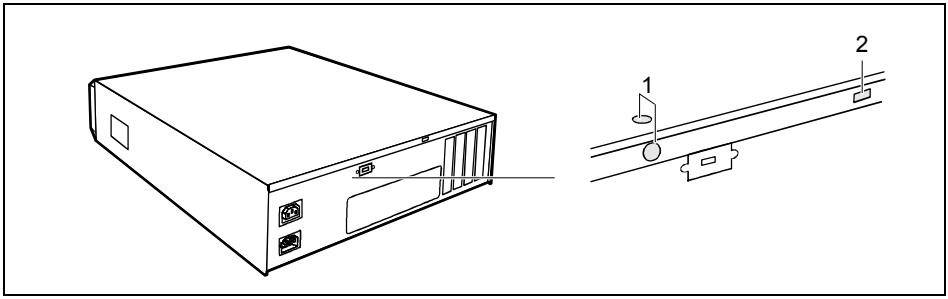
Settings in BIOS Setup

In *BIOS Setup* you can set the system functions and the hardware configuration of the device. When the PC is delivered, the default entries are valid (see "BIOS Setup" manual and if necessary technical manual for the mainboard). You may customise these settings to your requirements in the *BIOS Setup*.

Property and data protection

Software functions and mechanical anti-theft protection offer a broad range of functions for protecting your device and your personal data from unauthorised access. You can also combine these functions.

Anti-theft protection and lead-sealing



1 = Holes 2 = Device for "Kensington Lock"

There are three ways to protect your device from theft:
- with the holes (1) and a chain (lead-seal)
- with the holes (1) and a (pad)lock
- with the Kensington Lock device (2) and with a Kensington MicroSaver

To prevent unauthorised persons from opening the casing, the casing can be sealed. To do this, feed the sealing chain through the holes (1) and seal the chain with the lead seal.

You can also attach a padlock to the holes (1) to prevent unauthorised opening of the casing. You can also use the holes to anchor the casing if necessary.

BIOS setup security functions

The *Security* menu in *BIOS Setup* offers you various options for protecting your personal data against unauthorised access, e.g.:

- Preventing unauthorised *BIOS Setup* entry
- Preventing unauthorised system access
- Preventing unauthorised access to the settings of boards with their own BIOS
- Preventing system booting from the diskette drive
- Activating virus warnings
- Preventing unauthorised writing of diskettes
- Protecting BIOS from being overwritten
- Protecting the device from being switched on by an external device

You can also combine these functions.

You will find a detailed description of the *Security* menus and how to assign passwords in the technical manual for the mainboard or in the "BIOS Setup" manual.

Access authorisation via SmartCard

In systems equipped with a SmartCard reader, access can be restricted to those users who have a corresponding SmartCard.

Access protection with SystemLock

With *SystemLock* you can protect your system from unauthorised booting. Then a system can only be booted when the user inserts a valid SmartCard in the SmartCard reader and enters his/her personal code number (PIN). To use *SystemLock* you require the following components:

- External SmartCard reader
- *SystemLock* installed (see "BIOS Setup" manual)
- SmartCard

SystemLock controls access to your device. When a SmartCard is initialised, permissions are assigned for system access (system, setup, system+setup, admin). You can configure several SmartCards for one system and initialise them with different permissions. In addition you can protect access to your hard disk.

In this way users can be divided into user groups. Users of a user group use SmartCards with the same permissions.

More information on SystemLock

If you also want to use other security software in addition to *SystemLock* (e.g. *SMARTY*), please read the documentation on your security software beforehand.

SystemLock permissions

You can initialise a SmartCard with one of the following permissions:

System	The system starts following entry of the user PIN. You can change the user PIN.
Setup	You can open and change the *BIOS Setup* and change the user PIN.
System+Setup	The system starts following entry of the user PIN. You can open and change the *BIOS Setup* and change the user PIN.
Admin	The system starts following entry of the user PIN. You can change the user PIN an the administrator PIN, unlock locked SmartCards, open and change the *BIOS Setup* and generate additional SmartCards for this system.

For instructions on how to install and operate *SystemLock*, and how to initialise SmartCards, see the "BIOS Setup" manual.

Operating the SmartCard reader

► Connect the external SmartCard reader to your system as described in the instructions for the SmartCard reader.

After the device is switched on, you will be prompted to insert your SmartCard.

Troubleshooting and tips

Take note of the safety notes in the "Safety" manual and in the "Preparing for use" chapter, when you connect or disconnect cables.

If a fault occurs, try to correct it as described in the following places:

- in this chapter
- in the documentation of the connected devices
- in the help systems of the software used
- in the documentation of your operating system

If you fail to correct the problem, proceed as follows:

► Switch off the device.

► Make a note of the steps and the circumstances that led to the fault.

► Make a note of any error messages displayed.

► Note the ID number of your device. This number can be found on the type rating plate on the back of the casing.

► Contact your sales outlet or our customer service centre.

Installing new software

When installing programmes or drivers, important files may be overwritten and modified. To be able to access the original data in the event of any problems following installation, you should backup your hard disk prior to installation.

Power-on indicator remains unlit after you have switched on your device

This may be due to the following:

The mains voltage supply is faulty

► Check whether the power cable is plugged properly into the device and a grounded mains outlet.

► Switch the device on.

Internal power supply overloaded

► Pull the power plug of the device out of the mains outlet.

► Wait for a moment.

► Plug the power plug into a properly grounded mains outlet again.

► Switch the device on.

The screen stays blank

If your screen remains blank this may be due to the following:

Monitor is switched off

► Switch your monitor on.

Power saving has been activated (screen is blank)

► Press any key on the keyboard.

or

► Deactivate the screen saver. Enter the appropriate password.

Brightness control is set to dark

► Adjust the brightness control. For detailed information, please refer to the operating manual supplied with your monitor.

Power cable not connected

► Switch off the monitor and the device.

► Check that the monitor power cable is properly connected to the monitor and, depending on your device configuration level, to the device itself or to a grounded mains outlet.

► Check that the device power cable is properly plugged into the device and a grounded mains outlet.

► Switch on the monitor and the device.

Monitor cable not connected

► Switch off the monitor and the device.

► Check that the monitor cable is properly connected to the device and monitor.

► Switch on the monitor and the device.

Wrong monitor has been set under Windows 2000

► Restart the device.

► If the message *Starting Windows* appears, press function key **F8**

The *Windows 2000 Advanced Options Menu* appears.

► Select *Safe Mode* or *Safe Mode with Network*.

► Set the correct values for the attached monitor as described in the operating manual of the monitor by selecting *Start - Settings - Control Panel - Display - Settings*.

Wrong monitor has been set under Window XP

► Restart the device.

► Press F8 while the system is booting.

Either the *Windows Advanced Start Options* menu or the menu for selecting the operating system appears.

► If the menu for selecting the operating system appears, press F8.

► Select *Safe Mode* or *Safe Mode with Network*.

► Set the correct values for the attached monitor as described in the operating manual of the monitor by selecting *Start - Settings - Control Panel - Display* and then the *Appearance*, *Themes*, *Settings* tabs.

The wrong RAM modules have been inserted

See the technical manual for the mainboard for information on which memory modules can be used.

No mouse pointer displayed on the screen

► Shut down the operating system properly.

► Switch off the device.

► Check that the mouse cable is properly connected to the system unit.
If you use an adapter or extension lead with the mouse cable, check the connections.

► Make sure that only one mouse is connected.

► Switch the device on.

The mouse controller must be enabled if you use a PS/2 mouse on the PS/2 mouse port .

► Check in the *BIOS Setup* that the mouse controller is *Enabled*.

► Check that the mouse driver is properly installed and is present when the application programme is started. Detailed information can be found in the user guide for the mouse and application programme.

The floppy disk cannot be read or written

► Check that the write protection of the floppy disk or the floppy disk drive is activated (refer to the "BIOS Setup" manual and if necessary to the technical manual for the mainboard).

► Check the entry for *Diskette A:* in the *Main* menu of the *BIOS Setup*.

► Check that the floppy disk drive controller is enabled (refer also to the technical manual for the mainboard or in the "BIOS Setup" manual).

► Check that the cables of the floppy disk drive are properly connected (refer to "Installing and removing the floppy disk drive" chapter).

Time and/or date is not correct

You can set the time and date in the *BIOS Setup* or in the operating system.

► Set the time and date.

i If the time and date are repeatedly wrong when you switch on your PC, the on-board battery is flat. Change the lithium battery as described in the "Extensions to the mainboard" - "Replacing lithium battery" chapter.

Error messages on the screen

Error messages and their explanation are contained:

- in the technical manual for the mainboard
- in the "BIOS Setup" manual
- in the documentation for the programmes used

Restoring the hard disk contents

Should you need to restore your hard disk, the instructions are provided on the case of the "Recovery CD" (delivered with your system).

Tips

The device cannot be switched off with the ON/OFF switch

Cause: The device has not been switched on with the ON/OFF switch.

► Press the ON/OFF switch again.

Cause: System crash

► Press and hold the power button for at least four seconds until the device switches off.

Out of system resources

If you have too many applications running at once, you may experience problems due to a lack of system resources. In this case you should:

► close unnecessary applications

or

► run the applications in a different order

Other manuals

Additional manuals are provided as PDF files on the "User Documentation" or "Drivers & Utilities" CD.

System expansions

As the device has to be shut down in order to install/deinstall system hardware components, it is a good idea to print out the relevant sections of this chapter.

It may be necessary to update the BIOS when carrying out a system expansion or hardware upgrade. Additional information is contained in the "BIOS Setup" manual or possibly in the technical manual for the mainboard.

When installing components that become very hot, make sure that the maximum permissible temperatures of the individual components are not exceeded.

The device must be switched off when installing/removing the system expansions and may not be in the energy-saving mode.

This chapter describes all the activities required to modify your device hardware (e.g. installing boards or drives).

Read the supplied documentation before installing new drives and/or boards.

Refer to the technical manual for the mainboard before making any extensions to the mainboard.

Information about boards

Take care with the locking mechanisms (catches and centring pins) when you are replacing boards or components on boards.

To prevent damage to the board or the components and conductors on it, please take care when you insert or remove boards. Make sure expansion boards are inserted straightly.

Never use sharp objects (screwdrivers) for leverage.

Boards with electrostatic sensitive devices (ESD) are identifiable by the label shown.

When you handle boards fitted with ESDs, you must, under all circumstances, observe the following points:

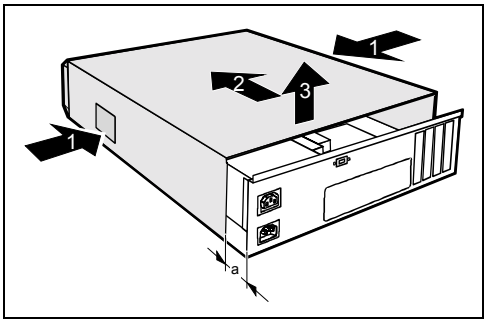
- You must statically discharge yourself before working with boards (e.g. by touching a grounded object).
- The equipment and tools you use must be free of static charges.
- Pull out the power plug before inserting or removing boards.
- Always hold boards with ESDs by their edges.
- Never touch pins or conductors on boards fitted with ESDs.

Opening the casing

► Switch off the device. The device must not be in the energy-saving mode!

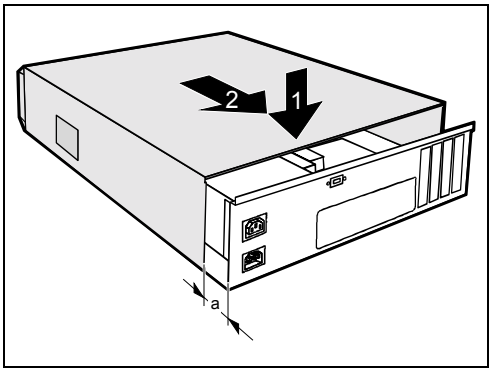
Please take note of the safety information in the "Important notes" chapter.
Pull the power plug out of the mains outlet!

► Remove all cables from the casing.
► Place the casing in a convenient working position.



► Press the two locking catches (1), hold them pressed and slide the upper casing in the direction of the arrow (2) until the spacing (a) is approximately 3 cm.
► Lift off the top cover in an upward direction (3).

Closing the casing



► Place the top cover on the casing base (1) so that the distance (a) is approximately 3 cm.
Ensure that the top cover of the casing engages in the guide rails in the lower part of the casing.

► Push the top cover in the direction of the arrow (2) until it engages.
► Return the system unit to its original position.
► Reconnect the cables.

Installing and removing a board

Please take note of the section "Information about boards".

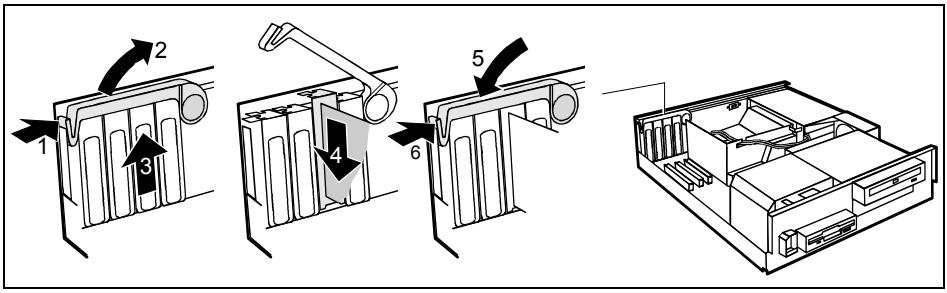
The number, position and arrangement of the board slots on the mainboard can be found in the technical manual for the mainboard. Boards may already be installed when the device is shipped.

You can fix boards in two ways:

- with a locking device
- with screws

Installing a board with a locking device

► Open the casing (see "Opening the casing" chapter).



► Press on the locking lever in the direction of the arrow (1), unhook it and swing it up in the direction of the arrow (2).

► Remove the rear slot cover plate from the slot (3).

Do not dispose of the cover plate. For cooling, protection against fire and in order to comply with EMC regulations, you must refit the cover plate if you remove the board.

► Make the required settings for the board.

► Push the board up to its slot (4) as far as the stop.

► Press the board into the slot so that it engages.

► Close the locking lever (5) and press on it in the direction of the arrow (6) until it engages.

► If necessary, connect the cables.

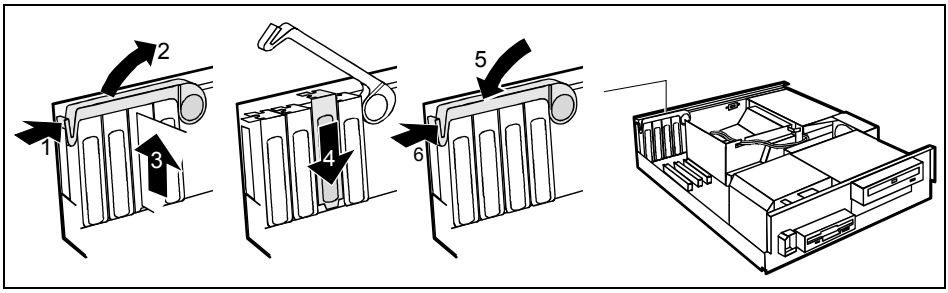
► Close the casing (see "Closing the casing" chapter).

i If you have installed or removed a PCI board, please check the relevant PCI slot settings in the *BIOS Setup*. If necessary, change the settings. Further information is provided in the PCI board documentation. The two outer slots are suitable for low-profile cards with an adapter.

Removing a board with a locking device

► Open the casing (see "Opening the casing" chapter).

► Disconnect the cables connected to the board.



► Press on the locking lever in the direction of the arrow (1), unhook it and swing it up in the direction of the arrow (2).

► Pull the board out of the slot (3).

! For cooling, protection against fire, and in order to comply with EMC (electromagnetic compatibility) regulations, you must refit the cover plate.

► Push the rear slot cover plate into the slot (4). Ensure that the point of the cover engages on the outside of the casing.

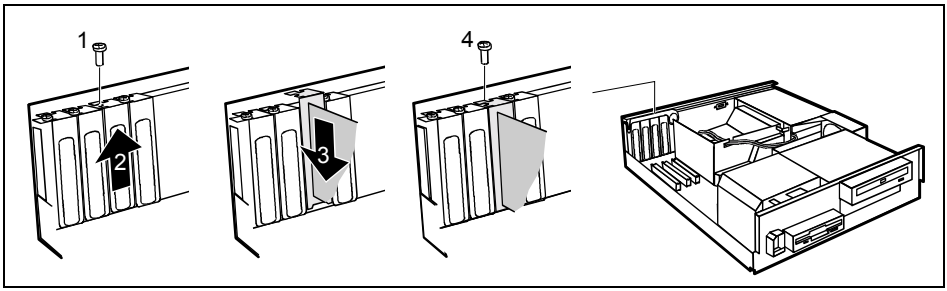
► Close the locking lever (5) and press on it in the direction of the arrow (6) until it engages.

► Close the casing (see "Closing the casing" chapter).

i If you have installed or removed a PCI board, please check the relevant PCI slot settings in the *BIOS Setup*. If necessary, change the settings. Further information is provided in the PCI board documentation.

Installing board with screw

► Open the casing (see "Opening the casing" chapter).



► Remove the screw (1).

► Remove the rear slot cover plate from the slot (2).

Do not dispose of the cover plate. For cooling, protection against fire and in order to comply with EMC regulations, you must refit the cover plate if you remove the board.

► Make the required settings for the board.

► Push the board up to its slot (3) as far as the stop.

► Press the board into the slot so that it engages.

► Fasten the board into place with the screw (4).

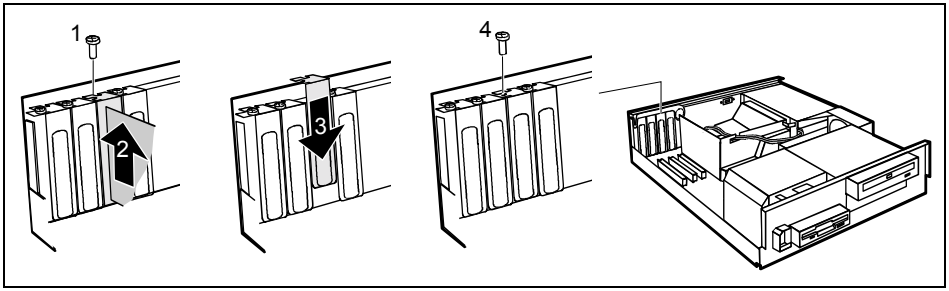
► If necessary, connect the cables.

► Close the casing (see "Closing the casing" chapter).

If you have installed or removed a PCI board, please check the relevant PCI slot settings in the *BIOS Setup*. If necessary, change the settings. Further information is provided in the PCI board documentation. The two outer slots are suitable for low-profile cards with an adapter.

Removing board with screw

- ► Open the casing (see "Opening the casing" chapter).
- ► Disconnect the cables connected to the board.



- ► Remove the screw (1).
- ► Remove the board from the casing (2).

For cooling, protection against fire, and in order to comply with EMC (electromagnetic compatibility) regulations, you must refit the cover plate.

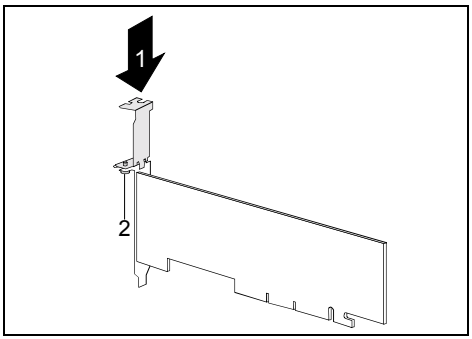
- ► Push the rear slot cover plate into the slot (3). Ensure that the point of the cover engages on the outside of the casing.
- ► Fasten the rear slot cover plate with the screw (4).
- ► Close the casing (see "Closing the casing" chapter).

If you have installed or removed a PCI board, please check the relevant PCI slot settings in the *BIOS Setup*. If necessary, change the settings. Further information is provided in the PCI board documentation.

Low-Profile boards

For units with a particularly low overall height, there are so-called low-profile boards with a slot cover with a lower overall height to match the low-profile units. To also install these low-profile boards in normal board slots, you must mount a corresponding slot adapter beforehand

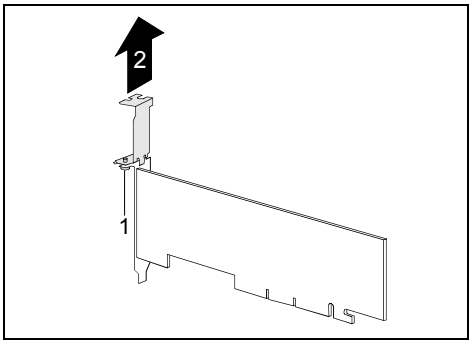
Mounting slot adapter



► Fit the slot adapter on the slot cover of the low-profile board (1) and screw it on (2).

Now you can install the low-profile board in a suitable slot like a normal board (see the "Installing and removing a board" chapter).

Removing slot adapter



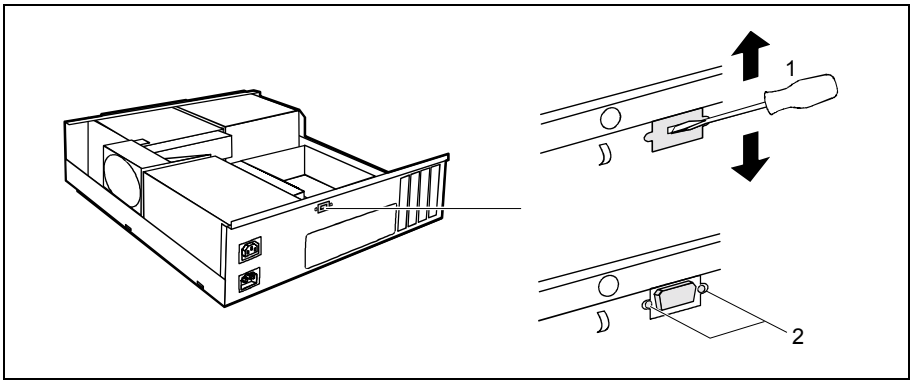
► Unscrew the screw (1) and remove the slot adapter (2).

Installing an additional serial port

There are two ways of installing an additional serial port. The condition is that the mainboard has a free internal serial port.

1. An additional serial interface can be installed in a rear slot cover plate like a board.
   - ► Install the rear slot cover plate with the serial port like a board (see "Installing and removing a board").
   - ► Connect the cable of the additional serial port to the connector on the mainboard.

2. An installation opening for the serial port is provided on the rear panel of the casing. As a result, no board slot is occupied when a second serial port is installed.



   - ► Insert a screwdriver into the opening and break out the pre-stamped installation opening by moving it backwards and forwards (1).
   - ► Fasten the serial port with the screws (2).
   - ► Connect the cable of the additional serial port to the connector on the mainboard.

Installing and removing drives

The PC casing can accommodate a total of five drives:

- three accessible drives
  (two 5¼" drives and one 3½" drive)
- two non-accessible drives
  (3½" drives)

"Accessible drives" are e.g. DVD or CD ROM drives, into which a data carrier can be inserted from outside. Non-accessible drives are e.g. hard disk drives.

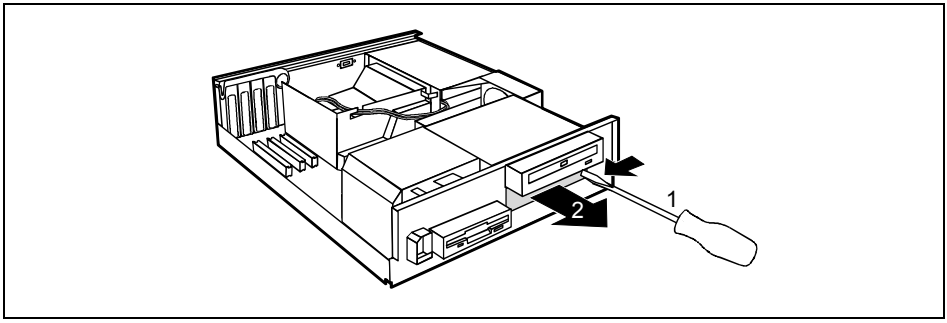
Four IDE drives are supported as standard equipment. However, you should connect a maximum of two drives to your device. Ideally, hard disks are connected to IDE interface 1 and other drives to IDE interface 2 (see also the technical manual for the mainboard).
Depending on the mainboard, you can also use serial ATA drives.

You can also install a WLAN module for wireless LAN (Local Area Network) in place of the drive in the installation bay of the floppy disk drive.

Installing and removing an accessible drive

► Open the casing (see "Opening the casing" chapter).

Installing an accessible drive

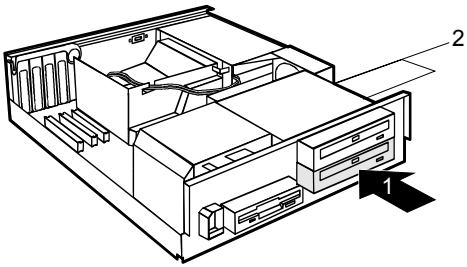


► Insert a screwdriver into the opening of the blind cover (1) and remove the cover (2).

i Do not throw away the cover. For cooling, protection against fire, and in order to comply with EMC regulations, you must refit the cover if you remove the drive again later.

► Take the new drive out of its packaging.

► Adjust the required settings on the drive (if necessary, on already-installed drives as well).

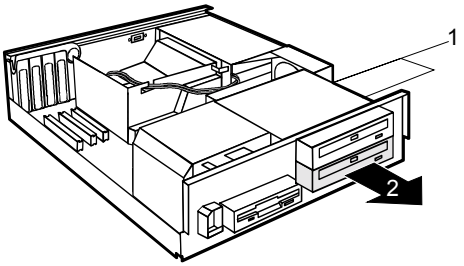


- ► Slide the accessible drive into the casing (1).
- ► Fasten the drive into place with the two screws (2).
- ► Plug the data and the power supply connectors into the drive. Make sure the polarity is correct.
- ► Close the casing (see "Closing the casing" chapter).

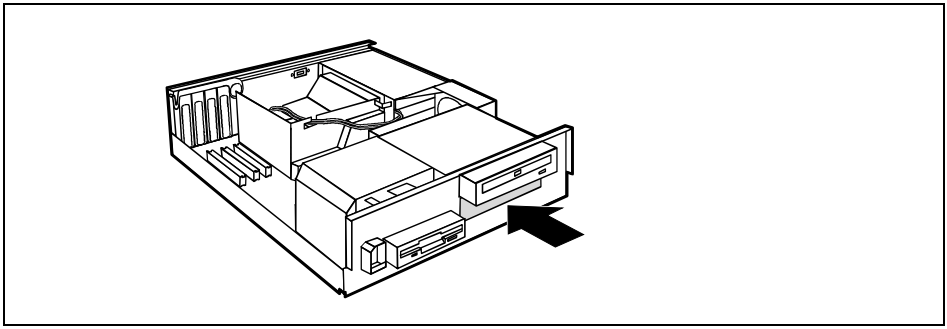
i It may be necessary to modify the entry for the drive in the *BIOS Setup*.

Removing an accessible drive

- ► Pull the data and the power supply connectors from the desired drive.



- ► Remove the two screws (1) and take the drive out of the drive cage (2).
- ► If necessary, make the required settings on the remaining hard disk drive.



► Place the blind cover in the casing again.

► Close the casing (see "Closing the casing" chapter).

i It may be necessary to modify the entry for the remaining drives in the *BIOS Setup*.

Installing and removing the floppy disk drive

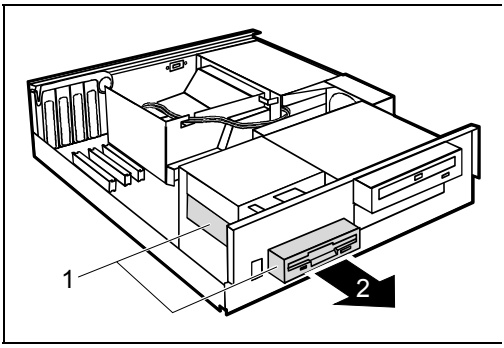
► Open the casing (see "Opening the casing" chapter).

► Remove the green cover from the drive cage.

i To install or remove the floppy disk drive, first the USB audio port cage must be removed, regardless of whether or not it is equipped with USB audio ports.

► Remove the USB audio port cage (see the section "Removing USB audio port cage").

Removing the floppy disk drive



► Remove the screws (1).

► Pull the drive far enough out of the casing (2) so that you can reach the connectors on the rear of the drive.

► Remove the data and power supply connectors from the floppy disk drive.

► Detach any problem cables from the hard disk drive.

i If the cables are too short and you cannot pull the drive far enough out of the casing, you will have to remove the cables from the other drive that is still in place.

You can now either install a new floppy disk drive or a WLAN module in the installation bay as described in the corresponding sections.

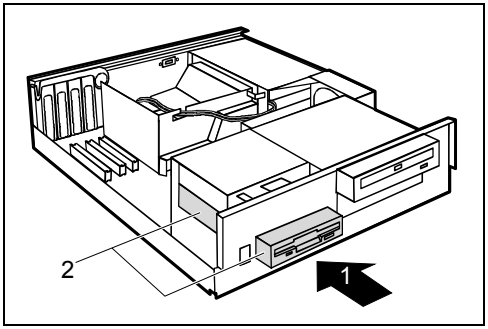
- ► Install the USB audio port cage (see the section "Installing USB audio port cage").
- ► If necessary, reconnect the cables.
- ► Mount the green cover on the drive cage again.
- ► Close the casing (see "Closing the casing" chapter).

i It may be necessary to modify the entry for the drive in the *BIOS Setup*.

Installing the floppy disk drive

- ► Feed the floppy disk drive data cable and power supply cable through the floppy disk drive slot and out of the casing.
- ► Fit the data and power supply connectors to the floppy disk drive.

i If the cables are too short and you cannot connect them to the drive outside the casing, you will have to connect them to the drive after installing it.



- ► Slide the drive into its bay (1).
- ► Fasten the floppy disk drive with the screws (2).

- ► Install the USB audio port cage (see the section "Installing USB audio port cage").
- ► Mount the green cover on the drive cage again.
- ► Close the casing (see "Closing the casing" chapter).

i It may be necessary to modify the entry for the drive in the *BIOS Setup*.

Installing and removing the hard disk drive

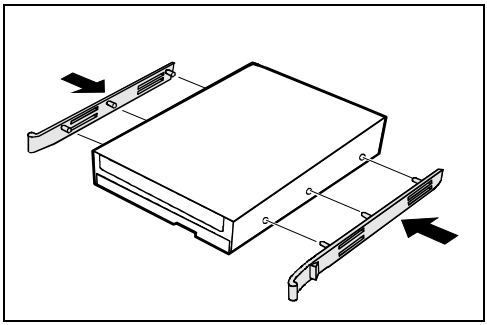
► Open the casing (see "Opening the casing" chapter).

The EasyChange rails for a second hard disk are in the slot for the second hard disk.

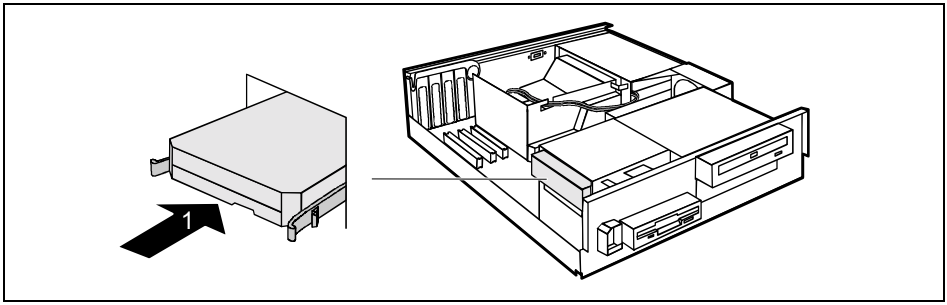
Installing a hard disk drive

► Take the new hard disk drive out of its packaging.

► Make the required settings on the drive (e.g. Master/Slave/CableSelect).



► Secure the EasyChange rails on the side of the hard disk by inserting the upper pins of the EasyChange rail in the corresponding holes of the hard disk.



► Remove the green cover from the drive cage.

► Push the hard disk drive into the casing (1) until the EasyChange rails engage.

► Connect the data and power supply cables to the hard disk drive or to the hard disk drives.

i

IDE interface:
Connect the blue plug of the data cable to the connection on the mainboard. Connect the plug on the other end to the hard disk drive.

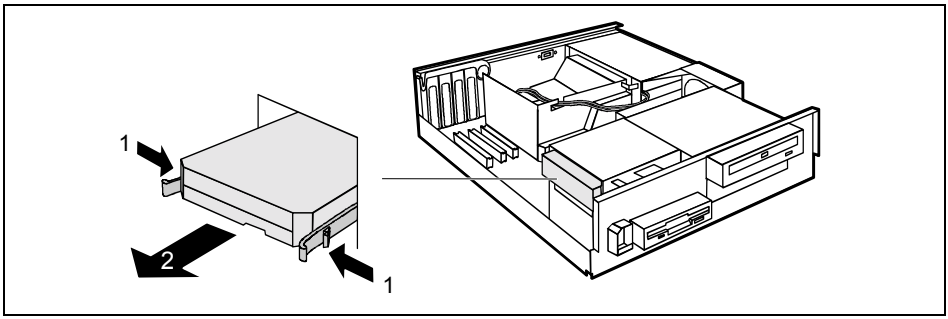
Serial ATA interface:
Connect the angled plug of the data cable to the drive and the straight plug to the connection on the mainboard.

- ► Mount the green cover on the drive cage again.
- ► Close the casing (see "Closing the casing" chapter).

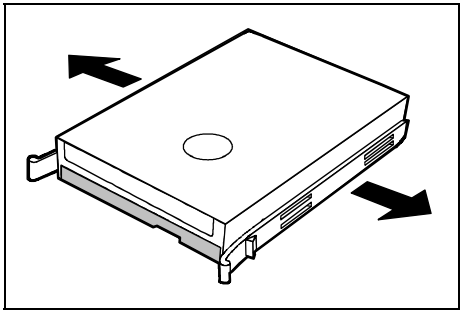
i It may be necessary to modify the entry for the drive in the *BIOS Setup*.

Removing a hard disk drive

- ► Disconnect all cables connected to the drive (data cable, power supply cable).
- ► Remove the green cover from the drive cage.



- ► Press the EasyChange rails in the direction of the arrows (1).
- ► Pull the hard disk drive out of the carrier (2).



- ► Pull the EasyChange rails off the hard disk drive.

If you do not require the EasyChange rails for another hard disk, it is best to store them in the installation bay for the second hard disk.

- ► Mount the green cover on the drive cage again.
- ► Close the casing (see "Closing the casing" chapter).

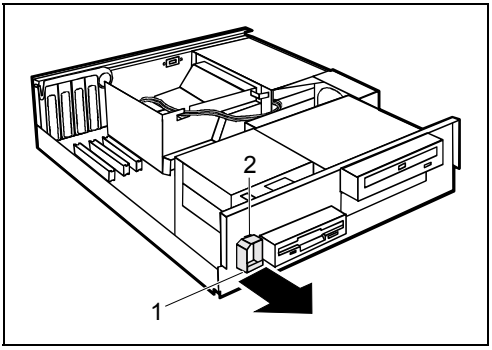
i It may be necessary to modify the entry for the drive in the *BIOS Setup*.

Removing and installing USB audio port cage

For some work steps it is necessary to remove and reinstall the USB audio port cage, regardless of whether or not it is equipped with USB audio ports.

- ► Open the casing (see "Opening the casing" chapter).
- ► Remove the green cover from the drive cage.

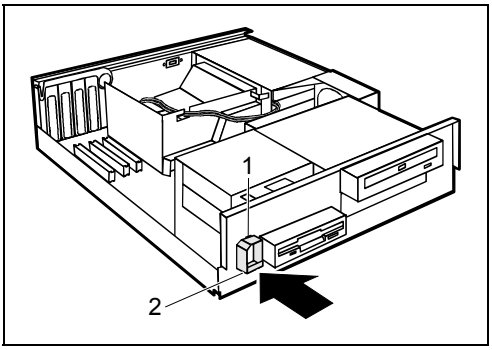
Removing USB audio port cage



- ► If the USB audio port cage is equipped with USB audio ports, pull the port cable off the mainboard.
- ► Remove the screw (1).
- ► Unhook the USB audio port cage at the locking lug (2) and remove it from the casing.

Now you can replace the floppy disk drive or install a WLAN module as described in the corresponding sections.

Installing USB audio port cage



- ► Hook in the USB audio port cage at the locking lug (1) and secure it with the screw (2).
- ► If the USB audio port cage is equipped with USB audio ports, connect the port cable to the connection on the mainboard.

- ► Mount the green cover on the drive cage again.
- ► Close the casing (see "Closing the casing" chapter).

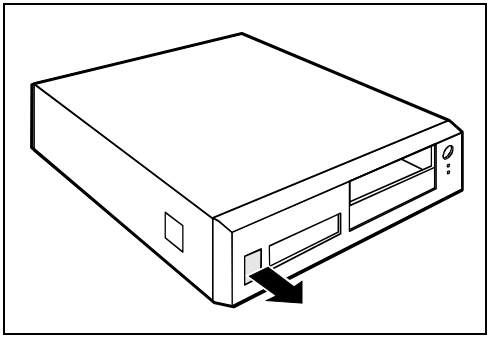
Installing and removing USB audio ports

Two USB ports combined with two audio ports (headphone out, microphone in) can be installed in den USB audio port cage next to the floppy disk drive.

► Open the casing (see "Opening the casing" chapter).

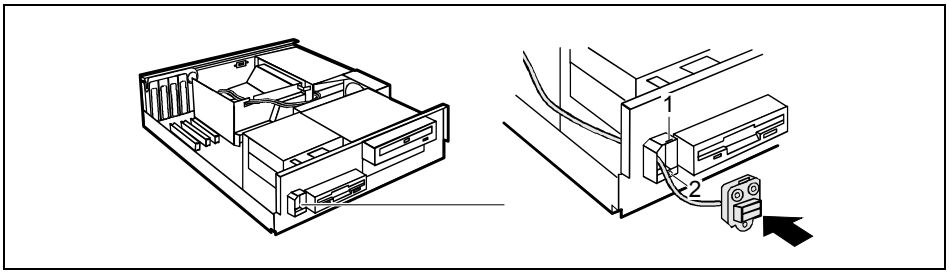
► Remove the green cover from the drive cage.

Installing USB audio ports



► Push the blind cover out of the casing (top cover) from the inside.

You should keep the blind cover if you want to remove the interface again at a later point in time.



► Feed the cables of the USB audio ports through the opening provided for the ports in the unit front panel and into the inside of the unit.

► Hook the catch of the USB audio ports into the eye on the USB audio port cage (1).

► Fasten the USB audio ports with the screw (2).

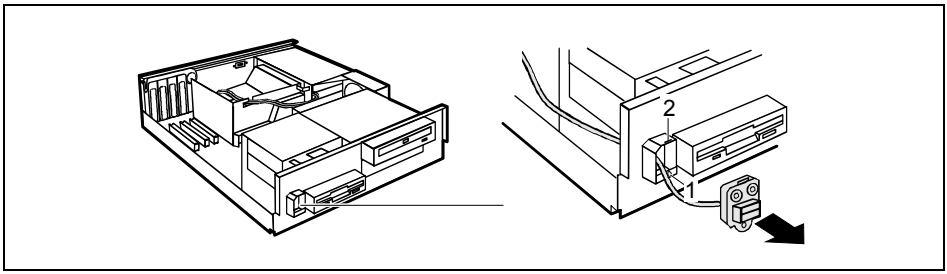
► Connect the USB audio cables to the corresponding connectors on the mainboard (see also the technical manual for the mainboard).

► Mount the green cover on the drive cage again.

► Close the casing (see "Closing the casing" chapter).

Removing USB audio ports

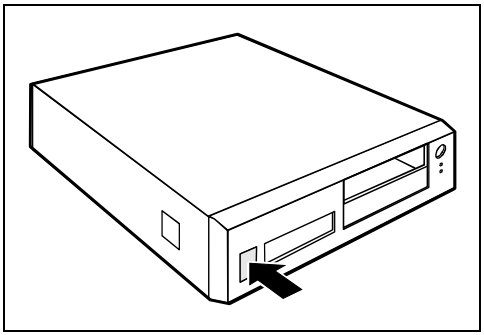
► Detach the USB /audio port connectors from the mainboard (see the technical manual for the mainboard).



► Loosen the screw (1).

► Unhook the locking lug of the USB audio ports from the USB audio port cage (2).

► Pull the USB /audio ports and their cables out of the casing.



► Press the blind cover from the outside into the opening until you can feel it engage.

► Mount the green cover on the drive cage again.

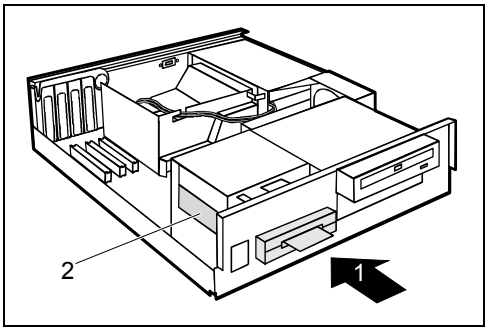
► Close the casing (see "Closing the casing" chapter).

Installing and removing a WLAN module

You can also install a WLAN module for wireless LAN (Local Area Network) in place of the drive in the installation bay of the floppy disk drive.

- ► Open the casing (see "Opening the casing" chapter).
- ► Remove the green cover from the drive cage.
- ► Remove the USB audio port cage (see the section "Removing USB audio port cage").
- ► Remove the floppy disk drive (see "Removing the floppy disk drive").

Installing WLAN module



- ► Slide the WLAN module into the open installation opening (1).
- ► Fasten the WLAN module with the screw (2).
- ► Connect the USB cable of the WLAN module onto the corresponding connector on the mainboard (also see "Technical Manual" for the mainboard).

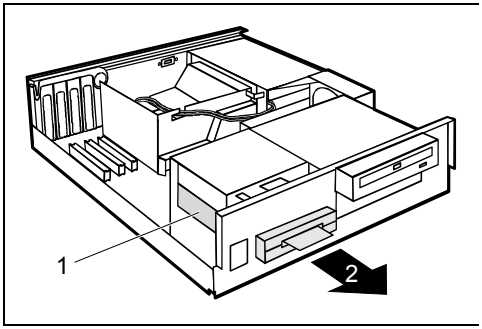
- ► Install the USB audio port cage (see the section "Installing USB audio port cage").
- ► Mount the green cover on the drive cage again.
- ► Insert the cover provided with the WLAN module in the casing from the inside.
- ► Close the casing (see "Closing the casing" chapter).

i

More detailed information on the use of Wireless LAN can be found in the "Wireless LAN" manual.

This manual is provided as PDF file on the "User Documentation" or "Drivers & Utilities" CD.

Removing WLAN module



- ► Remove the green cover from the drive cage.
- ► Disconnect the USB cable of the WLAN module from the connector on the mainboard.
- ► Remove the screw (1).
- ► Pull the WLAN module out of the installation opening.

- ► Mount the green cover on the drive cage again.
- ► Press the cover provided with the WLAN module out of the casing from the inside.
- ► Close the casing (see "Closing the casing" chapter).

Extensions to the mainboard

The description of how to upgrade the main memory and/or processor is contained in the technical manual for the mainboard.

- ► Open the casing (see "Opening the casing" chapter).

Upgrading main memory

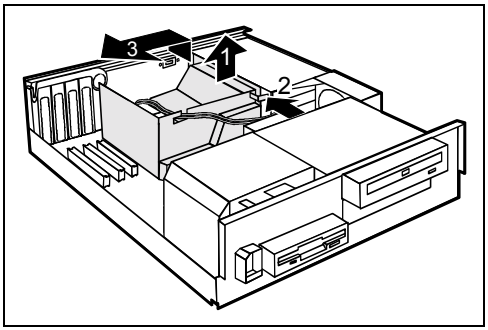
- ► Upgrade the memory according to the description in the technical manual for the mainboard.
- ► Close the casing (see "Closing the casing" chapter).

Replacing processor

To replace the processor you must first remove the ventilation cover.

The size of the ventilation duct differs depending on the configuration level of your device. The locking lug can be located on either the left or right. The locking lug is located on the right in the following illustrations.

Removing ventilation duct



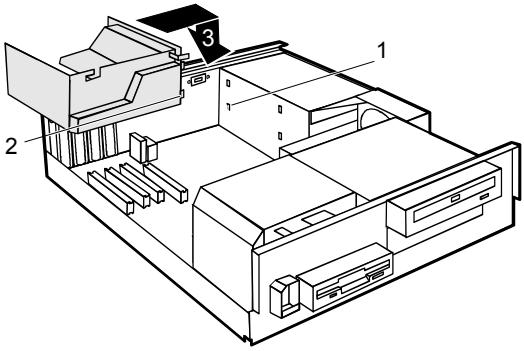
- ► Detach any problem cables (1).
- ► Hold down the locking lug (2), grasp the ventilation duct from above and lift it out of the casing in the direction of the arrow.

The locking lugs on the ventilation duct are extremely sensitive. For this reason, do not apply any force when handling the ventilation duct.

Replacing processor

- ► Make the desired changes (see the technical manual for the mainboard).

Installing ventilation duct



i The locking lugs on the ventilation duct are extremely sensitive. For this reason, do not apply any force when handling the ventilation duct.

- ► Set the ventilation duct in the casing such that the catches (2) engage in the eyes on the power supply (1).
- ► Slide the ventilation duct downwards (3) until it engages noticeably.
- ► If necessary, reconnect the cables.
- ► Close the casing (see "Closing the casing" chapter).

Replacing lithium battery

In order to permanently save the system information, a lithium battery is installed to provide the CMOS-memory with a current. A corresponding error message notifies the user when the charge is too low or the battery is empty. The lithium battery must then be replaced.

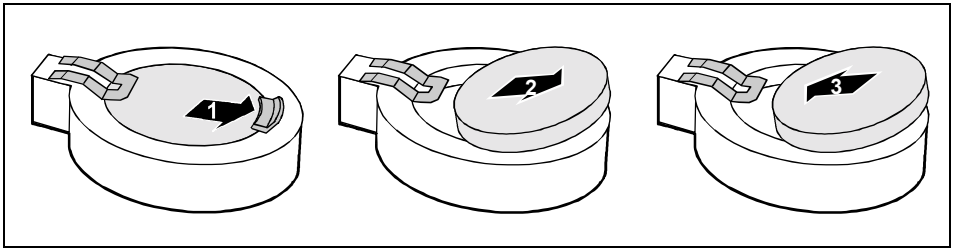
Incorrect replacement of the lithium battery may lead to a risk of explosion!

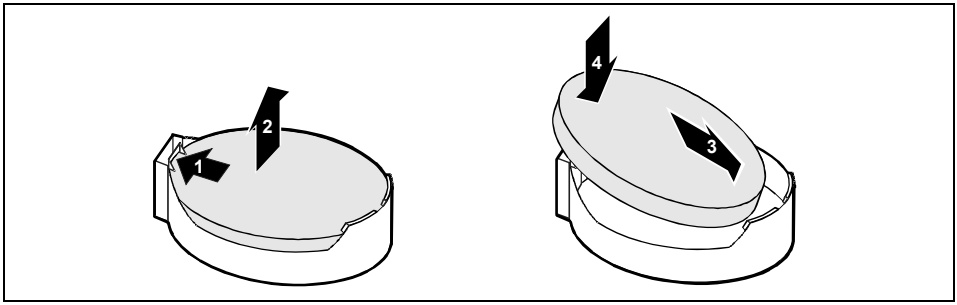
The lithium battery may be replaced only with an identical battery or with a type recommended by the manufacturer.

Do not throw lithium batteries into the household waste. They must be disposed of in accordance with local regulations concerning special waste.

Make sure that you insert the battery the right way round. The plus pole must be on the top!

The lithium battery holder exists in different designs that function in the same way.





- ► Press the locking lug in the direction of the arrow (1); the battery jumps somewhat out of the holder.
- ► Remove the battery (2).
- ► Push the new lithium battery of the identical type into the holder (3) and press it downward until it engages (4).
- ► Close the casing (see "Closing the casing" chapter).

Technical data

Electrical data

Regulations complied with:	IEC60950/VDE0805, KL1950, CSA22.2 No.950
Protection class:	I
Rated voltage range	100 V -127 V / 200 V - 240 V
Frequency:	50 Hz - 60 Hz
Max. rated current	
● Device with monitor socket:	100 V - 127 V 6.0 A 200 V -240 V 3.0 A
● Monitor socket (output):	100 V - 127 V 3.0 A 200 V -240 V 1.5 A

Dimensions

Width/depth/height:	387 mm/445 mm/135 mm

Weight

with the basic configuration	approx. 13 kg

Environmental conditions

Environment class (3K2)	DIN IEC 721 part 3-3
Environment class (2K2)	DIN IEC 721 part 3-2
Temperature:	
● Operating (3K2)	15 °C .... 35 °C
● Transport (2K2)	-25 °C .... 60 °C

Condensation in operating must be avoided.

Clearance required to ensure adequate ventilation

Horizontal operating position:

● front	min. 200 mm
● rear	min. 200 mm
● right-hand side	min. 200 mm
● top	min. 200 mm

Vertical operating position:

● front	min. 200 mm
● rear	min. 200 mm
● left	min. 200 mm
● top	min. 200 mm

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